

FIG. 1

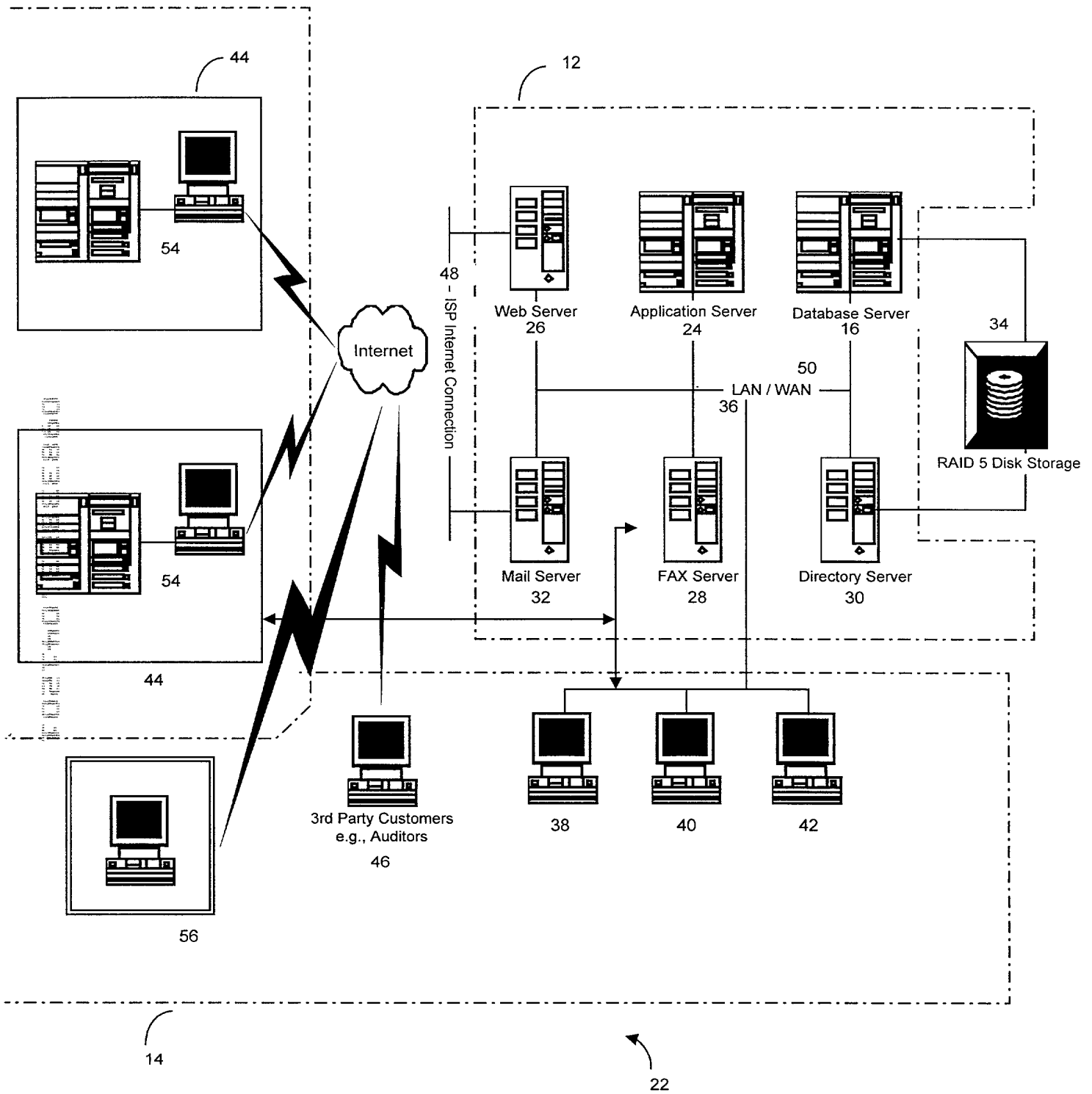
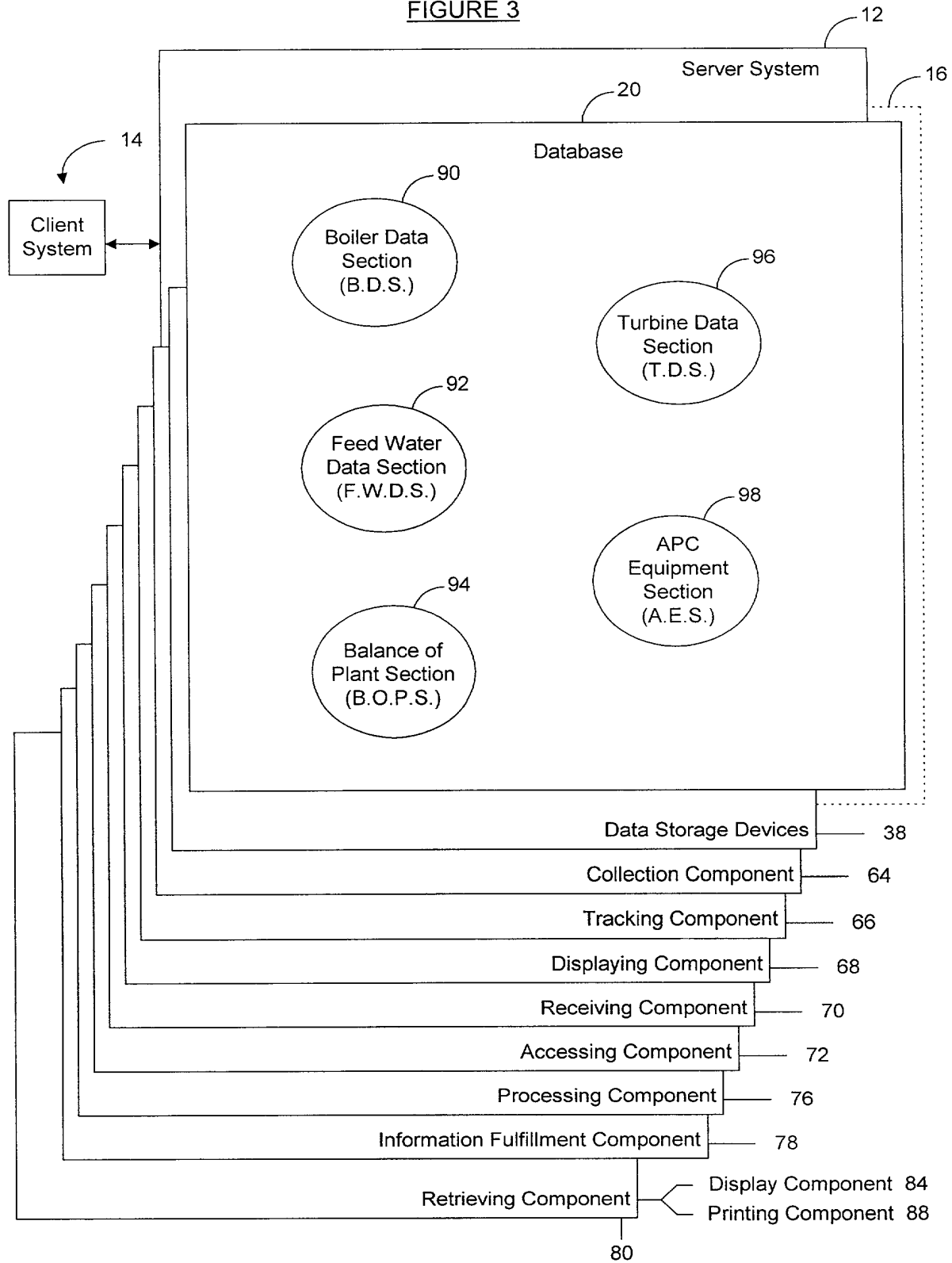


FIGURE 2

FIGURE 3



File Name CoalPer031001  
Project Name Sample Project  
Location USA  
Operator To Be Determined

Facility Generation Information (per unit information):

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
975	0	0	0	0	0	0	0
TYPICAL							
PERCENTAGE AVAILABLE							

Existing Operational Hours From CO 148 920

Dispatch Information

Unit 1											
Percentage of Available Hours Dispatched											
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
100.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
January	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
February	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
March	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
April	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
May	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
June	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
July	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
August	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
September	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
October	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
November	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
December	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
Dispatched Load											
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
January	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
February	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
March	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
April	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
May	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
June	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
July	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
August	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
September	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
October	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
November	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
December	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%

FIGURE - 4

[illegible]

FIGURE - 5

## Unit 4

Percentage of Available Hours Dispatched	2001
January	93.00%
February	93.00%
March	94.00%
April	94.00%
May	95.00%
June	95.00%
July	98.00%
August	98.00%
September	95.00%
October	95.00%
November	94.00%
December	94.00%

## Unit 5

Percentage of Available Hours Dispatched	Year
93.00%	2001
93.00%	January
93.00%	February
94.00%	March
94.00%	April
95.00%	May
95.00%	June
95.00%	July
96.00%	August
96.00%	September
95.00%	October
95.00%	November
94.00%	December
94.00%	

[illegible]

FIGURE 6



TABLE 8

Percentage of Available Hours Dispatched

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
January	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
February	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%
March	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
April	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
May	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
June	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
July	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%
August	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%
September	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
October	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%
November	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
December	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%
Dispatched Load	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
January	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
February	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
March	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%
April	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
May	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
June	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
July	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
August	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%	99.00%
September	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
October	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
November	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%
December	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%

FIGURE - 8



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Exhaust Information:

ACTUAL ANALYSIS

Metals & Ash Free	
Carbon	74.89%
Hydrogen	6.29%
Nitrogen	1.29%
Chlorine	0.02%
Sulfur	1.21%
Oxygen	13.21%

Ash Mineral Analysis	
Silica - SiO <sub>2</sub>	81.00%
Alumina - Al <sub>2</sub> O <sub>3</sub>	14.00%
Titanium - TiO <sub>2</sub>	1.10%
Ferric Oxide - Fe <sub>2</sub> O <sub>3</sub>	8.80%
Lime - CaO	24.00%
Magnesia - MgO	6.00%
Potassium Oxide - K <sub>2</sub> O	1.00%
Sodium Oxide - Na <sub>2</sub> O	1.20%
Sulfur Trioxide - SO <sub>3</sub>	12.20%
Phosphorus Pentoxide - P <sub>2</sub> O <sub>5</sub>	0.79%
Undetermined	2.29%

Proximate (Basis Dry)	
Fixed Carbon	54.00%
Volatile Matter	20.80%
Residues	29.80%
Ash	8.80%
Excess Air	100.00%
HHV	9.800

Operational Information:

ACTUAL CYCLE VALUES

Cycle

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Unit	Exhaust Flow (lb/hr)	Outlet Pressure (psia)	Outlet Temperature
------	----------------------	------------------------	--------------------

Unit 1 2,568,331 2,400 1,500

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

Unit 7

Unit 8

Unit	Exhaust Flow (lb/hr)	Outlet Pressure (psia)	Outlet Temperature (F)
------	----------------------	------------------------	------------------------

Unit 1 2,254,085 574 1,400

Unit 2

Unit 3

Unit 4

Unit 5

Unit 6

Unit 7

Unit 8

Exhaust Temperature (F)

Unit 1	490
Unit 2	0
Unit 3	0
Unit 4	0
Unit 5	0
Unit 6	0
Unit 7	0
Unit 8	0

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Black Temperature (F)

Unit 1	275
Unit 2	0
Unit 3	0
Unit 4	0
Unit 5	0
Unit 6	0
Unit 7	0
Unit 8	0

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FIGURE-9

Facility Equipment Information:

Flyash Control Equipment

Unit 1	Monomort	Unit 1
Unit 2	ESP	Unit 2
Unit 3	BAKOUK PLUS SORTED BAUS	Unit 3
Unit 4	ESP	Unit 4
Unit 5	ESP	Unit 5
Unit 6	ESP	Unit 6
Unit 7	ESP	Unit 7
Unit 8	ESP	Unit 8

SO2 Control Equipment

Unit 1	CEMEX	Unit 1
Unit 2	NO SO2 EQUIPMENT	Unit 2
Unit 3	SPY INJECTION	Unit 3
Unit 4	NO SO2 EQUIPMENT	Unit 4
Unit 5	NO SO2 EQUIPMENT	Unit 5
Unit 6	NO SO2 EQUIPMENT	Unit 6
Unit 7	NO SO2 EQUIPMENT	Unit 7
Unit 8	NO SO2 EQUIPMENT	Unit 8

Mercury Control Equipment

Unit 1	ACTIVATED CARBON	Unit 1
Unit 2	NO Hg CONTROL	Unit 2
Unit 3	NO Hg CONTROL	Unit 3
Unit 4	NO Hg CONTROL	Unit 4
Unit 5	NO Hg CONTROL	Unit 5
Unit 6	NO Hg CONTROL	Unit 6
Unit 7	NO Hg CONTROL	Unit 7
Unit 8	NO Hg CONTROL	Unit 8

NOx Control Equipment

Unit 1	SCR	Unit 1
Unit 2	LOW NOx BURNERS	Unit 2
Unit 3	SCR	Unit 3
Unit 4	LOW NOx BURNERS	Unit 4
Unit 5	LOW NOx BURNERS	Unit 5
Unit 6	LOW NOx BURNERS	Unit 6
Unit 7	LOW NOx BURNERS	Unit 7
Unit 8	LOW NOx BURNERS	Unit 8

Pricing Information

Coal Pricing	\$15.00
FOB Mine	\$15.00
Transportation	\$30.00

FIGURE-10

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# STEAM CONDITIONS:

Without QF Steam  
Superheater Flow 2,568,331  
Reheater Flow 2,254,665

With Equiv. QF Steam  
Superheater Flow 2,568,331  
Reheater Flow 2,254,665

lb/hr  
lb/hr

	Superheat	Reheat
<b>Inlet Conditions:</b>		
Steam Pressure - psia	2,470	639
Steam Quality	0	
Water/Steam Temp. - F	490	660
Enthalpy	476	1,325
<b>Outlet Conditions:</b>		
Steam Pressure - psia	2,415	589
Steam Temp - Deg F	1,000	1,000
Enthalpy	1,460	1,518
Heat Input	984	192

QF HEAT LOSS	No Loss
Pounds Per Hour	0
Pressure - psia	464.696
Temperature	460
Degrees of SH	50
QF Steam Enthalpy	1243.18
FW Enthalpy	476.14
Heat Loss - Btu/s	0
Increase in Steam - #/hr	0
Equv Output - MW	373

No Loss	Included
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Pounds Per Year 0.0000E+00

Reheat-To Superheat Ratio 0.877871661

## PREDICTED PERFORMANCE: AVERAGE LOAD

FUEL Pulverized Coal

TURBINE STEAM FLOW CORRECTION FACTOR

EVAPORATION Superheater lb/hr 2,568,331  
Reheater lb/hr 2,254,665

TEMP AT SUPERHEATER/REHEATER OUTLET F 1,000 / 1,000

PRES AT SUPERHEATER/REHEATER OUTLET psig 2,400 / 574

FEEDWATER TEMP F 490

GAS TEMP LEAVING AIR HEATER F 275

(uncorr.)

AMBIENT AIR TEMP. F 80

AIR TEMP LEAVING THE AIR HEATER (APPROX) F 552

EXCESS AIR pct 20

HEAT LOSSES

DRY GAS pct 4.36%

H2O & H2 IN FUEL pct 8.04%

H2O IN AIR pct 0.10%

CARBON pct 0.25%

RADIATION pct 0.35%

MFG. MARGIN pct 1.50%

HEAT CREDITS pct -0.41%

BLOWDOWN pct 0.00%

TOTAL pct 14.19%

EFFICIENCY pct 85.81%

GROSS HEAT FIRED MMbtu/hr 3,554.99

FUEL FIRED PER HOUR lb/hr 418,234

TPH 209.12

AVERAGE LOAD CONDITION DURING AVAILABLE HOURS % 100.00%

AVAILABLE HOURS 8,256

FUEL FIRED PER YEAR t/yr 1,726,472

TOTAL COMBUSTION PRODUCTS lb/hr 3,601,358

TOTAL COMBUSTION AIR ACFM 1,109,079

TOTAL ASH (100% UP) t/yr 11.50

TOTAL LIMESTONE (100% UP) t/yr 3.10

TOTAL FLYASH/LIMESTONE REMOVAL SYSTEM LOADING t/yr 25,596

FLUE GAS TO STACK lb/hr 3,601,358

LUNGSTROM AIR HEATER LEAKAGE lb/hr 0

SOOT BLOWING STEAM lb/hr 0

NET EVAPORATION lb/hr 2,568,331

POUNDS STM/KW 6.89

NO. OF UNITS 1

### HEAT RATE CALCULATION (APPROX.):

Gross Heat Rate (Total Plant) BTU/KW HR 192

Net Heat Rate (Turbine Only) BTU/KW HR 194

Plant Gross Heat Rate: BTU/KW HR 194

Plant Net Heat Rate BTU/KW HR 194

100% (MCR)

95.00%

0.9589

2,568,331

2,254,665

1,000 / 1,000

2,400 / 574

490

275

80

552

20

4.36%

8.04%

0.10%

0.25%

0.35%

1.50%

-0.41%

0.00%

14.19%

85.81%

3,554.99

418,234

209.12

100.00%

8,256

1,726,472

3,601,358

1,109,079

3,183,124

997,176

11.50

3.10

25,596

14.60

3,601,358

0

0

2,568,331

6.89

1

0.9589

2,439,914

2,141,932

1,000 1000

2,400 574

490

268

80

20

4.20%

8.02%

0.10%

0.24%

0.33%

1.43%

-0.39%

0.00%

13.92%

86.08%

3,366.55

396,065

198.03

95.00%

8,256

1,634,955

3,410,456

3,014,392

10.89

2.93

24,230

13.83

114,152

3,410,456

0

0

2,439,914

6.89

1

1

2

3

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FIGURE - 11

	2001	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total	
<b>Direct Labor</b>	<b>Total Plant Costs</b>										
Adjusted for local labor requirements year 1 - none	0										
	\$4,469,453									\$4,469,453	F
<b>Operator's Fees &amp; Services</b>	\$27,809									\$27,809	F
Bonus Payments:	\$0									\$0	F
Home Office Technical Support:	\$0									\$0	F
Percent of Annual Labor	\$0									\$0	F
Warranty Support:	\$0									\$0	F
Percent of Annual Labor	\$0									\$0	F
<b>Planned Maintenance*</b>	\$4,100,253									\$4,100,253	M
Boiler											
Turbine (Major Turbine Outage assumed in 1989)											
APC Equipment											
Feedwater System											
BCP											
<b>Unplanned Maintenance:</b>	\$410,023									\$410,023	M
1% of Planned Maintenance											
<b>Planned Spare Parts:</b>											
Boiler	\$1,721,081									\$1,721,081	V
Turbine	\$789,330									\$789,330	V
APC Equipment	\$144,191									\$144,191	V
Feedwater System	\$62,891									\$62,891	V
BCP	\$2,296,784									\$2,296,784	V
<b>Unplanned Spare Parts</b>	\$286,839									\$286,839	V
1% of Planned Spare											
<b>Employee Travel &amp; Relocation:</b>	\$95,300									\$95,300	F
<b>Other Employee Expenses, Fees and Services</b>	\$265,422									\$265,422	F
<b>Office/Administration expenses:</b>	\$381,872									\$381,872	F
<b>Contract Services:</b>	Included										
Percent of Annual Labor											
Ash Disposal:	\$1,128,890	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,128,890	V
Start-Up Fuel	694,716	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$694,716	V
Consumables*	\$379,877									\$379,877	V
Chemicals:	\$459,068									\$459,068	V
Coal:	\$48,910,089	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,910,089	V
Limestone:	\$369,488	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$369,488	V
Purchased Power:	\$212,706	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,706	V
Equipment Rental:	\$1,419,653									\$1,419,653	V
<b>Total Operating Budget</b>	<b>Case 4</b>										
Taxes	\$0									\$0	F
Insurance	\$0									\$0	F
Not Included: Building Data Base											
<b>Total Operations Costs including Taxes and Insurance*</b>										\$98,170,837	
Operations Costs	2,261,796,823	0	0	0	0	0	0	0	0	2,261,796,823	
Cost of Generation										\$0.0238	

FIGURE 12

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O&M Cost Summary For: 2001				
	Fixed Costs	Variable Costs	Major Maintenance	Fuel
Direct Labor:	\$6,459,653			
Operator's Fees & Services:	\$327,289			
Bonus Payments:	\$0			
Home Office Technical Support:	\$0			
Warranty Support:	\$0			
Planned Maintenance:			\$4,160,334	
Power Marketing & Resource Management:	\$0			
Unplanned Maintenance:			\$410,033	
Planned Spare Parts:				
Boiler:		\$1,731,081		
Turbine:		\$768,330		
APC Equipment:		\$146,151		
Feeder System:		\$82,861		
BOP:		\$173,031		
		\$2,899,354		
Unplanned Spare Parts:		\$265,039		
Employee Travel & Relocation:	\$88,300			
Other Employee Expenses, Fees and Services:	\$266,422			
Office/Administration Expenses:	\$395,973			
Contract Services:	Included			
Ash Disposal:		\$1,125,990		
Start-up Fuel:		\$64,715		
Consumables:		\$79,877		
Chemicals:		\$468,886		
Coal:				\$48,510,098
Limestone:		\$508,446		
Purchased Power:		\$712,796		
Equipment Rental:		\$1,416,553		
Total Operating Budget:	\$6,822,668	\$7,216,116	\$4,610,367	\$48,510,098
	13.85%	10.39%	6.77%	99.84%
Fixed Costs	\$6,822,668			
Variable Costs		\$7,216,116		
Total		\$14,038,784		
Generation		\$14,038,784		
			\$4,610,367	\$48,510,098
				\$53,120,465
				\$53,120,465

FIGURE - 13

File Name: CoalPer031701  
Project Name: Sample Project  
Location: USA

# FIGURE 14

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Operator: To Be Determined

## Facility Generation Information (per unit information):

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total
Facility Net Output:	1	0	0	0	0	0	0	0	382.0
House Load (~5.5%):	352.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MW
House Load in MW	5.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	20.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	MW
Line Losses:	0	0	0	0	0	0	0	0	Total
Unit Gross Output:	373	0	0	0	0	0	0	0	373
	373	0	0	0	0	0	0	0	MW
O&M Costs Calculated:	1	1	1	1	1	1	1	1	
Eqv. Increased MW Output:	0	0	0	0	0	0	0	0	MW
(Approximate)	373	0	0	0	0	0	0	0	MW
Gross Output Used in O&M Calculations:	373	0	0	0	0	0	0	0	MW
Unit Net Heat Rate (HHV)	10,098	0	0	0	0	0	0	0	BTU/KWh
	10,654	0	0	0	0	0	0	0	kWh/MWh

## Operational Information For:

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total
Base O&M Labor Costs On	1	0	0	0	0	0	0	0	1
Gross Maximum Capacity	373	0	0	0	0	0	0	0	373
Net Maximum Capacity	352	0	0	0	0	0	0	0	352
Net Capacity Factor	88.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Availability Factor	84.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Gross Generation (Actual)	2,921,798	0	0	0	0	0	0	0	2,921,798
Net Generation (Actual)	2,761,087	0	0	0	0	0	0	0	2,761,087
Per Year = 1, Per Month = 2	8,760	0	0	0	0	0	0	0	0
Period Hours	8,258	0	0	0	0	0	0	0	0
Available Hours	0	0	0	0	0	0	0	0	0
Forced Outage Hours	0	0	0	0	0	0	0	0	0
Planned Outage Hours	0	0	0	0	0	0	0	0	0
Maintenance Outage Hours	0	0	0	0	0	0	0	0	0
Average Load Condition (Gross)	354	0	0	0	0	0	0	0	MW
Average Load Condition (Net)	334	0	0	0	0	0	0	0	MW
	85.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
QF Steam Flow (% of MCR)	0%	0%	0%	0%	0%	0%	0%	0%
Pounds Per Hour (Average)	0	0	0	0	0	0	0	0
Pounds Per Year	0	0	0	0	0	0	0	0
Pressure (psig)	460	460	450	450	450	450	450	450
Degrees of SH (F)	50	50	50	50	50	50	50	50

(Input 0 for estimated steam or input actual degrees of SH)

## Coal Related Information:

17-Mar-01

Exchange Rate (X/US\$)	1	US\$
Cost per Ton of Fuel (including trans.)		\$15.00
		\$15.00
		\$30.00
		\$33.07
		\$17.00
		\$0.88
		\$176
		\$10.00
		2
		\$0.00
		\$0.00
		\$15.00
		2
		\$0.80
		\$0.50

Operator Related Information:	
Operator Fee	\$0
Operator Bonus	\$0
Home Office Tech Support	\$0
Warranty Support	\$0
Number of skills	4
Union/non-union Facility	0
Overtime	10%
	40%

Facility Equipment Information:							
Type Of Boiler Equipment (1 or 2)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
Unit Design / Commercial Operation Date							
Number of Boilers							
Flyash Control System							
1 ESP							
2 BAGHOUSE							
3 BAGHOUSE PLUS GORETEX BAGS							
SO2 Control System:							
1 NO SO2 EQUIPMENT							
2 DRY INJECTION							
3 SCRUBBER							
Mercury Control System							
1 NO HG CONTROL							
2 ACTIVATED CARBON							

CoalPerf031701

### General Information

3/17/2001  
5 08 PM

FIGURE 15

248

050

163440 236360

1 LOW NOX BURNERS  
2 SNCR  
3 SCR

Cooling Tower: (Yes=1; No=0)

1 ACTUAL CYCLE VALUES  
2 STANDARD 1800 PSIG (NONREHEAT)  
3 STANDARD 2400 PSIG (5% OF)

Superheater:

(-1,080,000 @ 800 MW)

Flow without OF heat loss  
Equip. OF Steam Increase  
Total Steam Flow  
Outlet Pressure  
Outlet Temperature

Reheater:

-3,770,000 @ 800 MW  
Flow without OF heat loss  
Equip. OF Steam Increase  
Total Steam Flow  
Inlet Pressure (psig)  
Inlet Temperature (F)  
Outlet Pressure (psig)  
Outlet Temperature (F)

Feedwater Temperature

Stack Temperature

Ambient Temperature

Spiree Cost

Fuel Loss during Handling:

1 ACTUAL  
2 STANDARD  
SO2 Removal

Fuels Information:

1 ACTUAL ANALYSIS  
2 STANDARD BITUMINOUS  
3 STANDARD SUBBITUMINOUS  
4 STANDARD LIGNITE (TEXAS)  
5 STANDARD NATURAL GAS

Selected Fuels Input:

Fuel Analysis:

Ultimate Analysis  
Moisture  
Ash  
Carbon  
Hydrogen  
Nitrogen  
Chlorine  
Sulfur  
Oxygen

Excess Air:  
HHV:  
LHV:  
Proximate:  
Fixed Carbon (different)  
Volatile Matter  
Sulfur

20.00%  
8.500  
18.28  
Butane  
Gulone

Natural Gas (Gas analysis is entered on fuels page)

Oxygen  
Argon  
Carbon Dioxide  
Nitrogen  
Hydrogen  
Hydrogen Sulfide  
Methane  
Ethane  
Propane  
n-Butane  
n-Pentane  
Isopentane  
Total:  
Excess Air:  
HHV:  
LHV:

0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
0.00%  
10.00%  
0  
0  
Bu/GF(1)  
Bu/GF(1)

Note 1: (68F 30WG)

CoalPer031701

General Information

3/17/2001  
5:08 PM

254

FIGURE-16



7034740 636360

Moisture	
Ash	
29.55%	
5.45%	
100.00%	

✓ 258

Furnace Volume Design Parameters	
Volume - Cu. Ft.:	20,000
Surface - Sq. Ft. (EPRS - Up Nose):	200,000
NET/PA:	1,950,000
Carbon Loss	0.25%

FIGURE-17

**FIGURE-18**

270

File Name: CoalPerf031601  
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Escalation 4.00%  
Escalation Factor 1.070

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Total Facility
Number of Equipment Sets Per Unit	1	0	0	0	0	0	0	0	1
Unit Gross Output	373	0	0	0	0	0	0	0	373
	(9-Mar-01)								
<b>Development Costs</b>									
Internal Costs	\$11,832	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,832.68
Third Party Costs	\$12,326	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,325.70
Project Counsel	\$1,578	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,577.69
Development Contingency	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land Options	\$986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$986.06
Pre NTP EPC Cost	\$1,072	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,972.11
<b>Total Development Costs</b>	<b>\$28,694</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$28,694.24</b>
Development Fee	\$9,057	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,057.15
Mine Acquisition Costs	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Site Purchase	\$12,076	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,076.17
<b>Development Fee/Mine Acquisition/Site</b>	<b>\$21,133</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$21,133.30</b>
<b>Plant</b>									
Boilers									
Headers	\$4,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,307.00
Heating Surface	\$21,906	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,906.00
Waterwall	\$12,904	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,904.00
Steel	\$16,533	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,533.00
Piping Equipment	\$10,275	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,275.00
Misc Equipment	\$20,646	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,646.00
	\$86,601	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$86,600.85
Turbine Generators	\$38,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,324.26
BAGHOUSE	\$7,459	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,459.07
SCRUBBER	\$37,253	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,252.60
ACTIVATED CARBON	\$419.07	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$419.07
SCR	\$37,253	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,252.60
Circulating Water System	\$1,275.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,275.65
Electrical System & Equipment	\$23,330.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,330.45
Fuel Storage & Handling	\$17,662.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17,662.70
Infrastructure	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water Treatment	\$3,132.42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,132.42
Other	\$39,755.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39,755.15
Misc Insurance	\$515.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$515.62
<b>Fixtures</b>									
Boilers - not plant related	\$446.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$446.53
Chimneys	\$3,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,500.00
Cooling Towers	\$20,257.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,257.85
Coal Bunkers	\$1,002.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,002.37
<b>Land &amp; Buildings</b>									
Buildings	\$34,773.70	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34,773.70
<b>Other</b>									
EPC Target	\$49,085.86	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$49,085.86
<b>Total EPC Costs</b>	<b>\$402,048.65</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$402,048.65</b>
<b>Transmission Fees During Construction</b>	<b>\$4,021.87</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$4,021.87</b>
<b>Waste Water Pipeline</b>	<b>\$11,189.05</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$11,189.05</b>
<b>Management Services During Construction</b>									
General & Administrative	\$15,382.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,382.48
Professional Services	\$2,760.96	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,760.96
Engineering Consultants	\$1,972.11	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,972.11
Utilities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Owner's Mobilization G&A	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Owner's Costs	\$2,218.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,218.53
Management Services Fee	\$1,725.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,725.60
<b>Total Owner's Costs</b>	<b>\$24,059.78</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$24,059.78</b>
<b>O&amp;M Mobilization</b>									
Labor	\$8,606.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,606.58
Fee	\$1,015.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,015.84
G&A	\$3,470	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,470.00
Plant Consumables	\$1,356.81	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,356.81
Equipment	\$5,423.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,423.31
Owners G&A	\$9,663.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,663.35
	\$24,440.39	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24,440.39
<b>Infrastructure Costs</b>									
Roads	\$8,263.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,263.15
Community Infrastructure	\$1,054.09	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,054.09
Mine Industrial Area	\$5,180.74	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,180.74
Construction Camp	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water Management	\$1,178.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,178.37
<b>Total Infrastructure Costs</b>	<b>\$15,674.35</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$15,674.35</b>
<b>Owner's Contingency</b>									
Power Plant EPC Costs	\$40,204.67	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,204.67
Transmission Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Electrical Interconnection	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Infrastructure Costs	\$1,567.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,567.44
<b>Total Owner's Contingency</b>	<b>\$41,772.10</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$41,772.10</b>
<b>Financing Fees/Costs</b>									
Financial Advisor	\$8,409.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,409.37
Uplift Fee	\$8,381.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,381.48
	\$14,790.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,790.85
<b>Unit Gross Output</b>	<b>373</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>373</b>
<b>Total Cost</b>	<b>\$587,823</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$587,823</b>
<b>\$/kW Installed</b>	<b>\$1.578</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1.97</b>

File Name: CoalPerf031601  
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Date	Hours of Operation (% of operational year)	Mar-01	Mar-02	Mar-03	Mar-04	Mar-05	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	10 Year Average
Operational Year	1	2	3	4	5	6	7	8	9	10		
Waterwall	\$268	\$1,290	\$258	\$258	\$258	\$258	\$258	\$258	\$258	\$258	\$258	\$258
Heating Surface	\$439	\$2,193	\$439	\$439	\$439	\$439	\$439	\$439	\$439	\$439	\$439	\$439
Grates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pulverizers	\$0	\$1,032	\$0	\$258	\$0	\$516	\$0	\$1,032	\$0	\$258	\$258	\$258
Air Pre-Heater	\$0	\$1,032	\$0	\$258	\$0	\$516	\$0	\$1,032	\$0	\$258	\$258	\$258
Fuel Handling	\$0	\$88	\$0	\$177	\$0	\$354	\$0	\$708	\$0	\$177	\$88	\$88
Headers	\$0	\$215	\$0	\$0	\$0	\$0	\$0	\$215	\$0	\$0	\$0	\$0
Steel	\$0	\$0	\$0	\$0	\$0	\$17	\$0	\$0	\$0	\$0	\$0	\$0
Belt/Crushers	\$0	\$0	\$0	\$0	\$0	\$132	\$0	\$0	\$0	\$0	\$0	\$0
Casing/Refractory/Ductwork	\$0	\$0	\$0	\$0	\$0	\$177	\$0	\$0	\$0	\$0	\$0	\$0
Chemical Cleaning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$550	\$0	\$0	\$0	\$55
Sub-Total	\$697	\$5,651	\$697	\$1,388	\$697	\$2,143	\$697	\$4,488	\$697	\$1,301	\$1,301	\$2,066
Turbine (Insp/Overhaul)	\$0	\$1,916	\$0	\$0	\$0	\$0	\$0	\$1,916	\$0	\$0	\$0	\$383
Turbine Valves	\$0	\$575	\$0	\$0	\$0	\$0	\$0	\$575	\$0	\$0	\$0	\$144
Generator (Inspections)	\$0	\$766	\$0	\$0	\$0	\$0	\$0	\$766	\$0	\$0	\$0	\$153
Sub-Total	\$0	\$3,257	\$0	\$0	\$0	\$0	\$0	\$3,257	\$0	\$0	\$0	\$680
Anton Resin	\$344	\$0	\$0	\$376	\$0	\$0	\$0	\$407	\$0	\$0	\$188	\$132
Carbon Resin	\$0	\$141	\$0	\$0	\$0	\$125	\$0	\$0	\$0	\$0	\$0	\$27
MB Resin	\$141	\$0	\$0	\$110	\$0	\$0	\$0	\$125	\$0	\$0	\$141	\$52
Carbon Filters	\$78	\$0	\$78	\$0	\$0	\$0	\$0	\$78	\$0	\$78	\$0	\$39
Gravim Filters	\$0	\$0	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$38	\$0	\$5
Sub-Total	\$564	\$141	\$91	\$486	\$78	\$128	\$0	\$611	\$0	\$116	\$328	\$264
BAGHOUSE	\$0	\$0	\$164	\$0	\$0	\$164	\$0	\$0	\$0	\$164	\$0	\$49
SCRUBBER	\$0	\$0	\$310	\$0	\$0	\$310	\$0	\$0	\$0	\$310	\$0	\$83
Sub-Total	\$0	\$0	\$474	\$0	\$0	\$474	\$0	\$0	\$0	\$474	\$0	\$142
Electrical	\$0	\$233	\$0	\$233	\$0	\$233	\$0	\$233	\$0	\$233	\$233	\$117
I&C	\$0	\$117	\$0	\$117	\$0	\$117	\$0	\$117	\$0	\$117	\$117	\$58
Power Block	\$0	\$1,916	\$0	\$0	\$568	\$0	\$0	\$1,916	\$0	\$0	\$0	\$479
Ash Handling	\$413	\$0	\$206	\$0	\$0	\$0	\$0	\$413	\$0	\$413	\$0	\$165
General	\$122	\$0	\$139	\$0	\$146	\$0	\$156	\$0	\$122	\$0	\$0	\$68
Facilities/Infrastructure	\$0	\$122	\$0	\$139	\$0	\$156	\$0	\$170	\$0	\$170	\$0	\$71
Sub-Total	\$635	\$2,387	\$346	\$489	\$1,310	\$608	\$689	\$2,438	\$636	\$122	\$472	\$968
Total:	\$1,795	\$11,636	\$1,607	\$2,364	\$2,373	\$3,248	\$1,877	\$12,182	\$1,821	\$2,101	\$2,101	\$4,100

FIGURE - 19  
300

**General Project Information:**

File Name: CoalPerf031601

Project Name: **Sample Project**

Location: **USA**

Operator: **To Be Determined**

**Operator's Fees & Services:**

Operator Fee	\$0
Legal Services	\$139,805
Construction Services	\$146,709
Testing Services	<u>\$41,424</u>
Total Fees & Services	<b>\$327,939</b>

**Travel:** **\$86,300**

**Misc. Employee Expenses** **\$286,422**

FIGURE- 20

↑  
310

File Name: CoalPerf031601  
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Sample Project

Consumables:

Lubricating Oils		\$379,977
Hydraulic Oil.		
Solvents/Boiler Wash.		
Cleaning Materials.		
Welding Supplies		
Nuts/Bolts/Small Mechanical Parts:		
Fuses/Light Bulb/small Elect. Parts:		
Fittings/Small I&E Parts:		
Gas & Oil.		
Total Oils and Lubricants		\$379,977

Chemicals:

Boiler Water:	62.27%	\$285,603
Cooling Water:	36.38%	\$168,889
Demin. Regen.	1.35%	\$6,194
Fuel Oil.		
Sanitary		
NOx		
Aqueous Ammonia:		
Total Chemicals.		\$458,686

Gases:

Nitrogen:	\$0
Hydrogen:	\$0
Oxygen/Acetylene	\$0
NOx, CO, SO2, O2 Span Gas	\$0
Total Gases:	\$0

Office Supplies & Services:

Postage, Overnight Mail, etc:	\$17,104
Freight:	\$0
Telephone	\$41,038
Utilities	\$9,263
Dues, Subscriptions	\$70,914
Advertising	\$0
Camera/ Film/Photo Supplies:	\$0
Copier/Paper/Service:	\$0
Office Supplies:	\$40,194
General Supplies	\$0
Audio Visual Equipment:	\$0
Portable Radios/Service:	\$0
Drinking Water:	\$0
Safety Supplies:	\$0
Safety/Environmental Insp:	\$0
Instrument Service/Repair:	\$0
Vehicles/Service/Fuel:	\$165,284
Insurance Autos/Trucks	\$0
Lift Trucks/Service:	\$0
Small Tools:	\$0
Software for Computers:	\$271
Computer Hardware:	\$0
Building Maintenance:	\$4,594
Janitorial Supplies:	\$0
Misc. Expenses:	\$13,310
Uniforms:	\$0
Total Supplies and Services	\$361,973

Office Furniture/Rent:

Office Rent:	\$0
Desk/Chairs/etc:	\$0
Lab/Shop/Cntrl. Rm Equip:	\$0
Computer Lease:	\$0
Total Office Furniture	\$0

**FIGURE - 21**

Direct Mat'l

↑  
320

File Name: CoalPerf031601  
Project Name: Sample Project

Location: USA

Operator: To Be Determined

**Rentals/Lease:**

Tools:	
Equipment:	\$15,304
Office:	\$261,694
Office Equipment	\$57,431
Railcar:	\$1,066,871
Lease Auto/Tucks	\$17,253
Total Rentals:	\$1,418,553

**Planned Spare Parts:**

Boiler:	\$1,731,661
Turbine:	\$766,330
APC Equipment:	\$149,151
Feedwater System:	\$62,661
BOP:	\$176,591
Total Spare Parts:	\$2,886,394

FIGURE - 22

↑  
340

File Name: CoalPart031801  
Project Name: Sample Project

Location: USA

Operator: To Be Determined

Proximate Analysis:

FC	33.71%
VM	30.44%
S	0.65%
M	29.55%
A	5.45%
Total	100.00%
HHV (Btu/lb)	8,500

Information used in conjunction with the coal classification figure:

BTU	8504.88
DRY	33.70%

Project Coal Classification:

Coal Type:	3
Sub-	Sub-
(Calculated)	Bituminous
Hardgrove Grind Index:	OK

Ash Mineral Analysis:

Silica - SiO2	31.00
Alumina - Al2O3	14.00
Titanium - TiO2	1.10
Ferric Oxide - Fe2O3	8.50
Lime - CaO	24.80
Magnesia - MgO	6.00
Potassium Oxide - K2O	0.25
Sodium Oxide - Na2O	1.30
Sulfur Trioxide - SO3	12.20
Phosphorus Pentoxide - P2O5	0.70
Undetermined	2.35
Total	100.00

Ash Fusion Temperatures (Deg. F)	2188
Initial Deformation-Reducing ( Input Data )	2239
Initial Deformation-Oxidizing ( Input Data )	

PAHR Formula Relationships:

BASE/ACID RATIO:	0.7641
(A range of 4-7	
coals and results in low ash-fusibility temps )	
IRON/CALCIUM RATIO:	0.28
(3-0.3 indicative ,	
lowers the fusibility temp. of the ash.)	
IRON/COLOMITE RATIO:	0.21
(Bt. type ash is	
SILICA/ALUMINA RATIO:	2.21
(above 2.8 & b	

FIGURE - 23

# Project Natural Gas Analysis:

Natural Gas Analysis:		Molecular Weight		Percent by vol		Lb/100 Moles		Lb Constituent Per Lb Fuel		Lb Air Required for Combustion Per Lb Fuel		Lbs Dry Air Per Lb Constit.		BTUs Per Lb Fuel		#C/H F.L. (2)		Density #C/H F.L. (2)	
O2	A	32.00	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0946	0	0	0
CO2	A	44.00	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.117	0	0	0
N2	A	28.08	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0744	0	0	0
H2	A	2.02	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0083	0	0	0
H2S	A	34.08	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0911	0	0	0
CH4	A	16.03	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0425	0	0	0
C2H6	A	30.05	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.0803	0	0	0
C3H8	A	44.08	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.1196	0	0	0
C4H10	A	58.10	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.1582	0	0	0
C5H12	A	72.10	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.1894	0	0	0
C6H14	A	86.12	0.00%	0.00%	0.00	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0.2274	0	0	0
Total																			

Fuel Gas Weight		Molecular Weight of Fuel:	
#Gas/Cu. Ft. (gas)			
GH to GT (MMBTU)	372.8		
GH to Dist Burners	32.28		
Total GH:	405.08		
		59708	
		7144	
		426.553952	
HHV of Fuel ( BTU/Cu. Ft.)	0		
Cu. Ft. of Gas Fired / Hr	#DIV/0!		
Lbs. of Gas Fired / Hr	#DIV/0!		
Lbs. of Air / Hr	#DIV/0!		
Total Gas Flow @ ONEA	#DIV/0!		

## Natural Gas Heating Value Conversion Analysis:

17-Mar-01

Natural Gas Analysis:		Percent by vol.		Btu/CF (1)		HHV Comp. Btu (60F, 14.7psia)		LHV Comp. Btu (60F, 14.7psia)	
Oxygen	O2	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Argon	A	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Carbon Dioxide	CO2	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Nitrogen	N2	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Hydrogen	H2	0.00%	319.4	647	0.00	0.00	0.00	0.00	0.00
Hydrogen Sulfide	H2S	0.00%	1742.8	694.7	0.00	0.00	0.00	0.00	0.00
Methane	CH4	0.00%	2480.1	3215.6	0.00	0.00	0.00	0.00	0.00
Propane	C3H8	0.00%	3950.2	4981.233	0.00	0.00	0.00	0.00	0.00
Butane	C4H10	0.00%	4981.233	HHV =	0.00	0.00	0.00	0.00	0.00
Pentane	C5H12	0.00%	5981.233	HHV =	0.00	0.00	0.00	0.00	0.00
Hexane	C6H14	0.00%	6981.233	HHV =	0.00	0.00	0.00	0.00	0.00
Total									

Natural Gas Analysis:		Percent by vol.		Btu/CF (1)		HHV Comp. Btu (60F, 14.7psia)		LHV Comp. Btu (60F, 14.7psia)	
Oxygen	O2	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Argon	A	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Carbon Dioxide	CO2	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Nitrogen	N2	0.00%	0	0	0.00	0.00	0.00	0.00	0.00
Hydrogen	H2	0.00%	270	540	0.00	0.00	0.00	0.00	0.00
Hydrogen Sulfide	H2S	0.00%	685	1370	0.00	0.00	0.00	0.00	0.00
Methane	CH4	0.00%	895	1790	0.00	0.00	0.00	0.00	0.00
Ethane	C2H6	0.00%	1994.5	3989	0.00	0.00	0.00	0.00	0.00
Propane	C3H8	0.00%	2282.0	4564	0.00	0.00	0.00	0.00	0.00
Butane	C4H10	0.00%	2985.7	5971	0.00	0.00	0.00	0.00	0.00
Pentane	C5H12	0.00%	3689.4	7378	0.00	0.00	0.00	0.00	0.00
Hexane	C6H14	0.00%	4311.72	8623	0.00	0.00	0.00	0.00	0.00
Total									

HHV/LHV Ratio #DIV/0!

Notes:  
(1) Source Mark's Standard Handbook for Mechanical Engineers  
Ninth Edition Page 4-28

**Figure - 24**



Molecular Weights		
S	1	32.064
O	2	31.998
		64.063
		50.05%

SO<sub>2</sub> Offset Cost Assumption \$150.00 \$/Ton

Southern Fuels

@ 1.2 lbs  
SO<sub>2</sub>/million BTU<sup>A</sup>

Mines	Average BTU/lb Content	Average Percent Sulfur (S %)	Average Ash Content (%)	In Compliance (Y/N) *	S % allowed for Compliance	lbs SO <sub>2</sub> /MM Btu	SO <sub>2</sub> Reduction Efficiency	lbs SO <sub>2</sub> /MM Btu	Required Offsets Tons SO <sub>2</sub> /Ton Coal Fired	Cost of Offsets \$/Ton of Coal Fired
Bailey	12,950	2.44%	7.50%	N	0.778%	3.3	10.00%	2.97	0.038462	\$5.788
Colonial	12,800	0.93%	8.88%	N	0.769%	1.45	0.00%	1.45	0.018560	\$2.784
Whitetail	12,800	1.80%	8.25%	N	0.769%	2.5	0.00%	2.50	0.032000	\$4.800
Juliana	12,900	1.28%	9.75%	N	0.775%	2	0.00%	2.00	0.025800	\$3.870
Sawmill	12,800	1.28%	9.75%	N	0.775%	2	0.00%	2.00	0.025800	\$3.870
Sentral	12,800	1.28%	9.75%	N	0.775%	2	0.00%	2.00	0.025800	\$3.870
Winifrede	12,800	0.93%	9.25%	N	0.769%	1.45	0.00%	1.45	0.018560	\$2.784

8,500 0.92% 5.50% N 0.511% 2.17 0.00% 2.17 0.018445 \$2.787

41807.04

Provided Information		Project Info. Check	
Unit 1 Unit 2 Unit 3	HHV 8,551	Tons Fired 756,000	SO <sub>2</sub> (tons) 11,500
	8,551	756,000	13,510
	8,551	756,000	12,220
Unit 1 Unit 2	HHV 8,551	Tons Fired 2,272,000	SO <sub>2</sub> (tons) 11,500
	8,551	2,272,000	13,510
	8,551	2,338,000	12,518

Calculated Information:		Sub- Bituminous		SO <sub>2</sub> (1.2#/MMBtu)		tons of	
Project	HHV	% S	Sulfur (tons)	SO <sub>2</sub> /MMBtu	Allowable Tons	Offsets Required	
Unit 1	8,500	0.85%	1,917,002	2.00	16,493	10,968	#NUM!
Unit 2	8,500	0.85%	1,917,002	#NUM!	#NUM!	#NUM!	#NUM!
Unit 3	8,500	0.85%	1,917,002	#NUM!	#NUM!	#NUM!	#NUM!



■ REPLACEMENT RESERVE  
V WEC EXPENSES

Not Included Building Data Base				
	WATER	SEWER	QTY	COST
	#REF!	#REF!	#REF!	#REF!
	#REF!	#REF!	#REF!	#REF!
	TOTAL WATER & SEWER			
POLICES				APPROXIMATION
1 ALL RISK POLICY (\$50 MILLION)				\$200,000
2 BUSINESS INTERRUPTION (\$15 MILLION)				\$250,000
3 POLLUTION LIABILITY (\$1 MILLION)				\$50,000
4 POLLUTION LIABILITY (\$1 MILLION)				\$0
TOTAL INSURANCE				\$0

WATER & SEWER  
INSURANCE

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
PURCHASED POWER								
HOUSE LOAD	20,688	0	0	0	0	0	0	0
HOUSE LOAD KW	918.8	0	0	0	0	0	0	0
HOURS PER YEAR OFF LINE	10%	0%	0%	0%	0%	0%	0%	0%
% OF HOUSE LOAD PURCHASED	0	0	0	0	0	0	0	0
POWER COST	\$12,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ELECTRICITY COST	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DEMAND CHARGE								
TOTAL ELECTRICITY COST	\$12,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0
START-UP FUEL								
APPROXIMATE DAYS OFF LINE	21	0	0	0	0	0	0	0
NUMBER OF STARTS PER YEAR (AVG. 3 DAY OUTAGE)	7	0	0	0	0	0	0	0
GROSS HEAT INPUT OF UNIT (MILLION BTUS PER HOUR)	45,725	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!
NET HEAT INPUT OF UNIT (MILLION BTUS PER HOUR)	33,225	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!
AVERAGE LENGTH OF START-UP (HOURS)	4	4	4	4	4	4	4	4
HEAT INPUT FROM STARTS	14,891	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!
TOTAL MILLION BTUS REQUIRED FOR START-UP	14,891	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!	#N/A!
NATURAL GAS REQUIRED @	\$20.852	\$0.20 per Therm						
OIL REQUIRED @	\$84,715	\$0.80 per Gallon						

REAL ESTATE TAXES

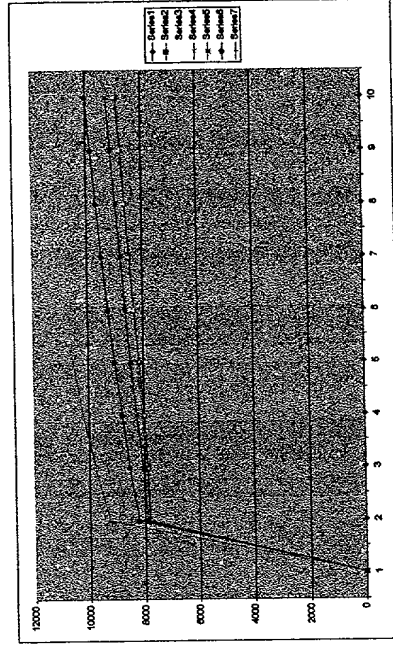
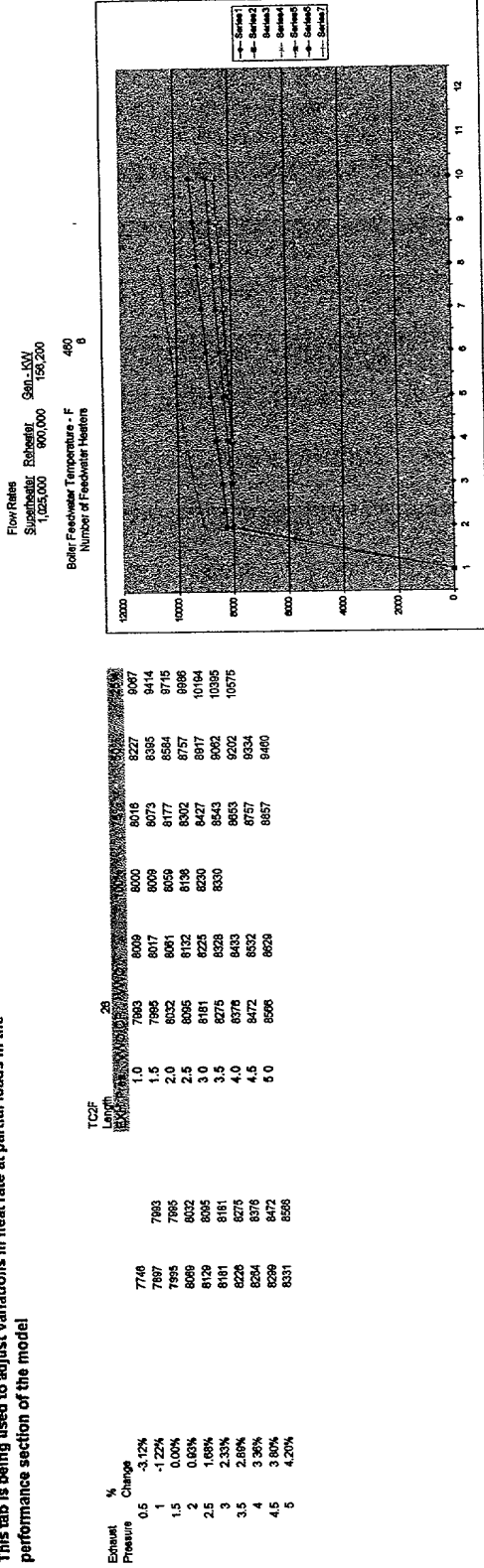
WHEELING COST

Facility C	Facility D
\$1,899,240	\$3,311,800
Calculated Value	1,751,68591 2,003,01953

FIGURE - 27

FIGURE 28

This tab is being used to adjust variations in heat rate at partial loads in the performance section of the model



Flow Rates  
Superheater Reheater Gen-KW  
1,025,000 900,000 150,200

Boiler Feedwater Temperature - F 480 6

Number of Feedwater Heaters

TC2F  
Last Stage Bucket Length 30

Load	7832	7853	7844	7816	8008	8531	8225	8283
Test Heat Rate	13,463	12,476	11,827	11,371	11,039	10,762	10,594	10,427
calc. uncorrected	8,742	9,773	9,625	9,336	9,068	8,800	8,532	8,264
Steam correction factor	1.362	1.277	1.208	1.156	1.113	1.080	1.050	1.021
	1,120,239	1,186,048	1,086,882	1,062,478	1,070,037	1,060,875	1,057,507	1,054,317

Heat Rates

Load	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
Test Heat Rate	13,463	12,476	11,827	11,371	11,039	10,762	10,594	10,427	10,260	10,093	9,926	9,759	9,592	9,425	9,258	9,091	8,924
calc. uncorrected	8,742	9,773	9,625	9,336	9,068	8,800	8,532	8,264	8,000	7,736	7,472	7,208	6,944	6,680	6,416	6,152	5,888
Steam correction factor	1.362	1.277	1.208	1.156	1.113	1.080	1.050	1.021	0.992	0.963	0.934	0.905	0.876	0.847	0.818	0.789	0.760
	1,120,239	1,186,048	1,086,882	1,062,478	1,070,037	1,060,875	1,057,507	1,054,317	1,051,127	1,047,937	1,044,747	1,041,557	1,038,367	1,035,177	1,031,987	1,028,797	1,025,607
200 MW Tandem Compound	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650	9,650
300 MW Tandem Compound	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113	10,113
400 MW Tandem Compound	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225	10,225
600 MW Tandem Compound	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964	8,964

66366360

0.004444  
1.17

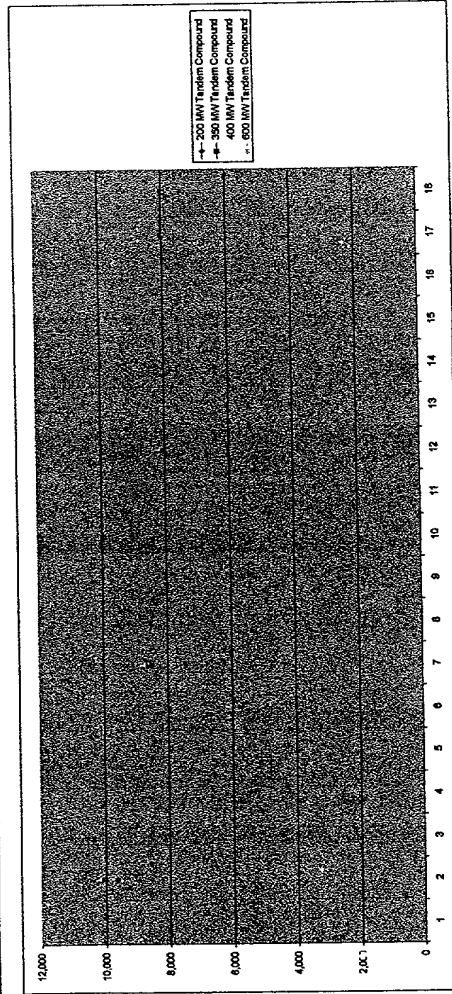
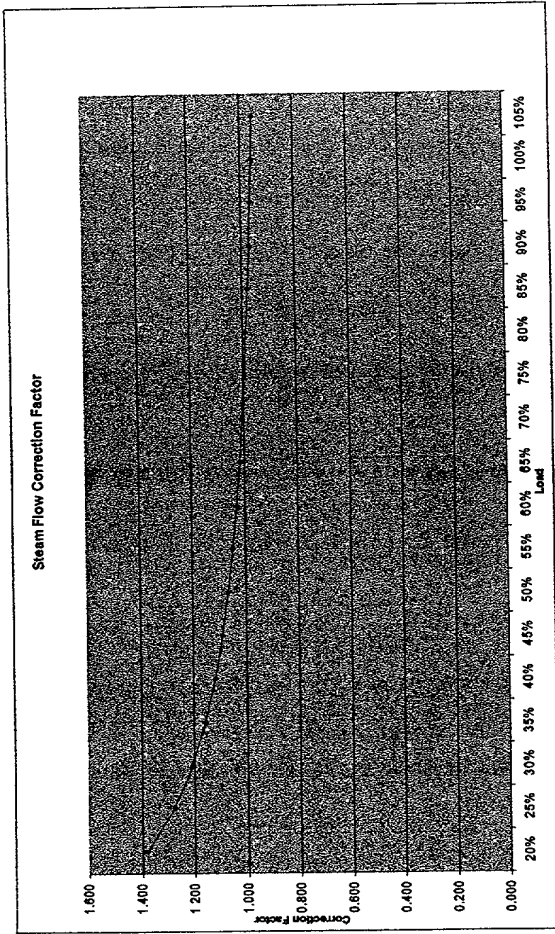


FIGURE - 29

Operator: To Be Determined

Location: USA

## Major Outages

3/17/2001  
6:05 PM

F16012E-31

UNIT / Dispatch Information	January-21	February-21	March-21	April-21	May-21	June-21	July-21	August-21	September-21	October-21	November-21	December-21	2021 Gross Capacity Factor: 89.5%
Hours Available for Dispatch	744	872	240	720	744	100.00%	100.00%	744	720	720	720	744	
Percentage of Hours Dispatched	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	
Total Ash (100% up) - tons	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	143,348	
Total Linebreaks (100% up) - tons	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	2,016	
Total Flyash/Linebreak Load - tons	10,174	8,169	3,262	8,846	10,174	5,846	10,174	10,174	2,080	2,160	2,160	10,174	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	263,301,377	237,820,598	84,934,928	254,807,784	263,301,377	254,807,784	263,301,377	263,301,377	248,008,784	263,301,377	254,807,784	263,301,377	Gross Generation 9,428
Unit Gross Heat Rate - BTU/KWh:	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	Net Generation 2,761,097,147
Plant Net Heat Rate - BTU/KWh:	248,819,801	224,740,465	80,294,432	240,793,356	248,819,801	240,793,356	248,819,801	248,819,801	240,793,356	248,819,801	240,793,356	248,819,801	Plant Net Heat Rate - BTU/KWh: 9,559
UNIT / Dispatch Information	January-22	February-22	March-22	April-22	May-22	June-22	July-22	August-22	September-22	October-22	November-22	December-22	2022 Gross Capacity Factor: 77.10%
Hours Available for Dispatch	744	872	240	720	744	100.00%	100.00%	744	720	720	720	744	
Percentage of Hours Dispatched	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	
Total Ash (100% up) - tons	140,097	126,539	45,160	137,035	143,110	140,006	147,777	147,777	147,777	147,777	147,777	147,777	
Total Linebreaks (100% up) - tons	7,705	6,960	2,465	7,537	7,871	7,700	8,128	8,128	7,700	7,700	7,537	7,788	
Total Flyash/Linebreak Load - tons	2,232	2,016	712	2,160	2,232	2,184	2,281	2,281	2,184	2,232	2,184	2,232	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	252,003,026	228,157,572	81,520,610	247,083,085	258,035,349	252,259,706	268,072,970	268,072,970	252,259,706	258,035,349	247,083,085	252,259,706	Gross Generation 2,515,870,138
Unit Gross Heat Rate - BTU/KWh:	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	Net Generation 2,377,487,279
Plant Net Heat Rate - BTU/KWh:	238,709,860	215,008,906	77,038,978	233,643,515	243,843,405	238,356,422	251,438,957	251,438,957	238,356,422	243,843,405	233,643,515	251,438,957	Plant Net Heat Rate - BTU/KWh: 9,551
UNIT / Dispatch Information	January-23	February-23	March-23	April-23	May-23	June-23	July-23	August-23	September-23	October-23	November-23	December-23	2023 Gross Capacity Factor: 87.6%
Hours Available for Dispatch	744	872	240	720	744	100.00%	100.00%	744	720	720	720	744	
Percentage of Hours Dispatched	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	140,097	126,539	45,160	137,035	143,110	140,006	147,777	147,777	147,777	147,777	147,777	147,777	
Total Ash (100% up) - tons	7,705	6,960	2,465	7,537	7,871	7,700	8,128	8,128	7,700	7,700	7,537	7,788	
Total Linebreaks (100% up) - tons	2,232	2,016	712	2,160	2,232	2,184	2,281	2,281	2,184	2,232	2,184	2,232	
Total Flyash/Linebreak Load - tons	9,538	8,376	3,167	8,987	10,104	5,884	10,409	10,409	9,884	10,104	9,887	10,021	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	252,003,026	228,157,572	81,520,610	247,083,085	258,035,349	252,259,706	268,072,970	268,072,970	252,259,706	258,035,349	247,083,085	252,259,706	Gross Generation 2,515,870,138
Unit Gross Heat Rate - BTU/KWh:	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	Net Generation 2,377,487,279
Plant Net Heat Rate - BTU/KWh:	238,709,860	215,008,906	77,038,978	233,643,515	243,843,405	238,356,422	251,438,957	251,438,957	238,356,422	243,843,405	233,643,515	251,438,957	Plant Net Heat Rate - BTU/KWh: 9,551
UNIT / Dispatch Information	January-24	February-24	March-24	April-24	May-24	June-24	July-24	August-24	September-24	October-24	November-24	December-24	2024 Gross Capacity Factor: 88.03%
Hours Available for Dispatch	744	868	240	720	744	93.00%	93.00%	744	720	744	720	744	
Percentage of Hours Dispatched	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	
Total Ash (100% up) - tons	140,097	131,058	45,160	137,035	143,110	140,006	147,777	147,777	147,777	147,777	147,777	147,777	
Total Linebreaks (100% up) - tons	7,705	7,203	2,465	7,537	7,871	7,700	8,128	8,128	7,700	7,700	7,537	7,788	
Total Flyash/Linebreak Load - tons	9,938	9,287	3,167	8,987	10,104	5,884	10,409	10,409	9,884	10,104	9,887	10,021	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	252,003,026	228,157,572	81,520,610	247,083,085	258,035,349	252,259,706	268,072,970	268,072,970	252,259,706	258,035,349	247,083,085	252,259,706	Gross Generation 2,515,870,138
Unit Gross Heat Rate - BTU/KWh:	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	Net Generation 2,377,487,279
Plant Net Heat Rate - BTU/KWh:	238,709,860	215,008,906	77,038,978	233,643,515	243,843,405	238,356,422	251,438,957	251,438,957	238,356,422	243,843,405	233,643,515	251,438,957	Plant Net Heat Rate - BTU/KWh: 9,551
UNIT / Dispatch Information	January-25	February-25	March-25	April-25	May-25	June-25	July-25	August-25	September-25	October-25	November-25	December-25	2025 Gross Capacity Factor: 87.6%
Hours Available for Dispatch	744	872	240	720	744	100.00%	100.00%	744	720	744	720	744	
Percentage of Hours Dispatched	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	
Total Ash (100% up) - tons	140,097	126,539	45,160	137,035	143,110	140,006	147,777	147,777	147,777	147,777	147,777	147,777	
Total Linebreaks (100% up) - tons	7,705	6,960	2,465	7,537	7,871	7,700	8,128	8,128	7,700	7,700	7,537	7,788	
Total Flyash/Linebreak Load - tons	9,938	8,376	3,167	8,987	10,104	5,884	10,409	10,409	9,884	10,104	9,887	10,021	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	252,003,026	228,157,572	81,520,610	247,083,085	258,035,349	252,259,706	268,072,970	268,072,970	252,259,706	258,035,349	247,083,085	252,259,706	Gross Generation 2,515,870,138
Unit Gross Heat Rate - BTU/KWh:	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	Net Generation 2,377,487,279
Plant Net Heat Rate - BTU/KWh:	238,709,860	215,008,906	77,038,978	233,643,515	243,843,405	238,356,422	251,438,957	251,438,957	238,356,422	243,843,405	233,643,515	251,438,957	Plant Net Heat Rate - BTU/KWh: 9,551
UNIT / Dispatch Information	January-26	February-26	March-26	April-26	May-26	June-26	July-26	August-26	September-26	October-26	November-26	December-26	2026 Gross Capacity Factor: 87.6%
Hours Available for Dispatch	744	872	240	720	744	100.00%	100.00%	744	720	744	720	744	
Percentage of Hours Dispatched	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	
Total Ash (100% up) - tons	140,097	126,539	45,160	137,035	143,110	140,006	147,777	147,777	147,777	147,777	147,777	147,777	
Total Linebreaks (100% up) - tons	7,705	6,960	2,465	7,537	7,871	7,700	8,128	8,128	7,700	7,700	7,537	7,788	
Total Flyash/Linebreak Load - tons	9,938	8,376	3,167	8,987	10,104	5,884	10,409	10,409	9,884	10,104	9,887	10,021	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	252,003,026	228,157,572	81,520,610	247,083,085	258,035,349	252,259,706	268,072,970	268,072,970	252,259,706	258,035,349	247,083,085	252,259,706	Gross Generation 2,515,870,138
Unit Gross Heat Rate - BTU/KWh:	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	9,428	Net Generation 2,377,487,279
Plant Net Heat Rate - BTU/KWh:	238,709,860	215,008,906	77,038,978	233,643,515	243,843,405	238,356,422	251,438,957	251,438,957	238,356,422	243,843,405	233,643,515	251,438,957	Plant Net Heat Rate - BTU/KWh: 9,551
UNIT / Dispatch Information	January-27	February-27	March-27	April-27	May-27	June-27	July-27	August-27	September-27	October-27	November-27	December-27	2027 Gross Capacity Factor: 87.6%
Hours Available for Dispatch	744	872	240	720	744	100.00%	100.00%	744	720	744	720	744	
Percentage of Hours Dispatched	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Average Dispatched Load	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	93.00%	
Fuel Fired tons	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	202,48	
Total Ash (100% up) - tons	140,097	126,539	45,160	137,035	143,110	140,006	147,777	147,777	147,777	147,777	147,777	147,777	
Total Linebreaks (100% up) - tons	7,705	6,960	2,465	7,537	7,871	7,700	8,128	8,128	7,700	7,700	7,537	7,788	
Total Flyash/Linebreak Load - tons	9,938	8,376	3,167	8,987	10,104	5,884	10,409	10,409	9,884	10,104	9,887	10,021	
Heat Rate Information:													
Unit Gross Heat Rate - BTU/KWh:	252,003,026	228,157,572	81,520,610	247,083,085	258,035,349	252,259,706	268,072,970	268,072,970	252,259,706	258,035,349	247,083,085	252,259,706	Gross Generation 2,515,870,138
Unit Gross Heat Rate - BTU/KWh:	9,428												

Assumed Tax (per ton of Carbon ):	\$40
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Sub-  
Bituminous

Facility Net Heat Rate (HHV):	BTU/KWH	9,956
HHV of Coal:	BTU/#	8,500
Percent Carbon in Coal (WT)		48.30%
Unit Capacity:	MW	373
Carbon Loss:		0.25%
Molecular Weight of Carbon		12.01
Molecular Weight of O2		32.00
Price per MMBtu from Coal		1.11
Price per Ton of Coal (delivered)	per Ton	\$30.00
Net KWH Produced:		2,761,097,147
Coal Fired	Tons	1,617,002
Carbon in Flue Gas	Tons	781,012
CO2	Tons	2,861,804
Fuel Cost:	Total	\$48,631,344
	\$/kwh	\$0.0176
Carbon Tax:		\$31,240,484
per KWH		\$0.0113
per MMBtu		\$1.14

Tons CO2/kWh

0.001036473

FIGURE-32



**FIGURE 33**

500

